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Vitrification Facility Now Demolition-Ready at West Valley Demonstration Project



These photos show the Vitrification Facility before and after the facility was declared demolition-ready.

WEST VALLEY, N.Y. – <u>EM</u>'s <u>West Valley Demonstration Project</u> (WVDP) declared the <u>Vitrification Facility</u> demolition-ready on March 16, after years of decontamination and deactivation to remove a variety of hazards.

WVDP and contractor CH2M HILL BWXT West Valley scheduled the demolition — DOE's first teardown of a vitrification facility — for later this year. Workers will begin demolishing the

radiologically "cleanest" areas first, such as the perimeter aisles, then move to the facility's other areas, such as the Vitrification Cell, which housed all of the major radioactive process equipment. This strategy minimizes the potential for cross-contamination of facility areas and reduces the cost of decontaminating equipment and materials transferred from one area to another.

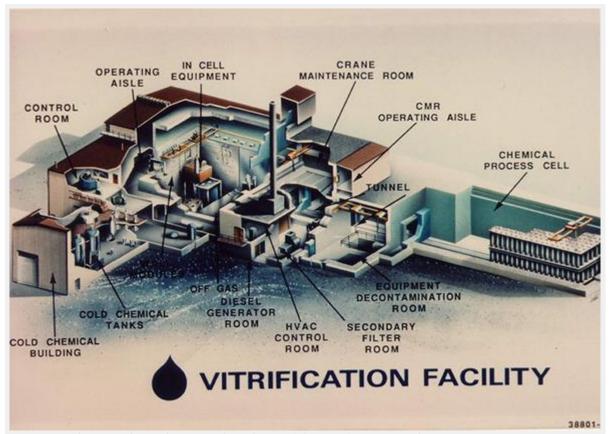


An aerial view of the Vitrification Facility.

Workers will control the potential spread of contamination through water misting, encapsulation fixatives, regular housekeeping activities, enclosures, adherence to established work practices, and fulltime monitoring by radiological control technicians. WVDP placed 16 air monitoring stations outside the site boundary and others around the demolition area to monitor for potential migration of contamination.

Once used to solidify about 600,000 gallons of high-level waste (HLW) liquid and sludge, the 11,000-square-foot, 50-foot-tall concrete structure — one of the site's major remaining facilities — is reinforced with structural steel and sided with sheet steel. Its walls and roof are between 2 and 4 feet thick. Demolition will generate an estimated 6,500 tons of waste for shipment to an offsite licensed disposal facility.

The team performed characterization and decontamination work to support conventional, uncontained "open-air" demolition techniques. When possible, workers used mechanical or remote equipment to minimize worker exposure to radiological, mechanical and chemical hazards.



A cutaway drawing shows the internal workings of the Vitrification Facility.

Late last year, the team achieved <u>another critical milestone</u> by shipping and disposing three large vitrification components at Waste Control Specialist in Andrews, Texas.

The Vitrification Facility included operating aisles, working areas to support operations, and auxiliary facilities for vitrification support functions. It operated from 1996 to 2002, producing 275 stainless steel canisters of HLW. WVDP repurposed the facility in 2007 for remote waste processing prior to deactivation. Last year, WVDP finished moving the canisters to dry storage onsite to prepare the facility for demolition.

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Focus on Women's History Month: EM Leader Shares Her Story



Acting EM Assistant Secretary Sue Cange is pictured at the EM Consolidated Business Center.

CINCINNATI – <u>Acting EM Assistant Secretary Sue Cange</u> explained how a diverse workforce benefits the <u>DOE</u>'s cleanup program and shared her leadership story during a visit to the <u>EM Consolidated</u> <u>Business Center</u> (EMCBC) on March 22.

"The fact is our people are EM's greatest asset," Cange told the EMCBC workforce. "We all benefit from having a workforce that not only brings their best work to the table, but also brings with them their diverse life experiences and backgrounds to draw upon. There is no question that combination leads to a well-rounded EM team and ultimately translates into executing our mission more effectively."

The event was organized by EMCBC's Diversity Council to coincide with Women's History Month.

With a long history of women leaders, EM employs many women, including engineers, scientists, managers and craftspeople.

"It is my hope that in sharing my story, it will serve as encouragement for you to mentor both young women and men, for I believe we all have a responsibility to pass on our experiences for the benefit of all," Cange said to workers at the Cincinnati office.

Cange shared her story of becoming an engineer and leader in a male-dominated field while raising three children. As she discussed her path to EM, Cange recalled a guest speaker in her high school science class who sparked the notion Cange could pursue a Science, Technology, Engineering, and Mathematics (STEM) career. Cange noted the strong support she received from her mother, and recalled being one of only a handful of women in the School of Engineering at Vanderbilt University.

Cange talked about her work at the U.S. Environmental Protection Agency, and how she later became the first professional woman to join the DOE's Formally Utilized Sites Remedial Action Program at EM's Oak Ridge site.

These days, Cange focuses on cleanup progress at EM's field sites. She pointed to EMCBC site successes, such as completing the high-level waste canister relocation project at the West Valley Demonstration Project (WVDP) and surpassing the halfway point of the Moab Uranium Mill Tailings

Remedial Action Project (UMTRA). She also highlighted <u>a new EM-wide strategic planning initiative</u> to better tackle the cleanup program's longer-term challenges.

Cange advised the group that diversity can improve each employee and the greater organization.

"It's important to realize how diversity can benefit you as an individual but also as an organization – and take time to foster that," she said.

EM supports a variety of STEM programs, such as science fairs and bowls, and internships. The organization is developing a next-generation workforce with well-paying jobs critical to completing the cleanup mission through partnerships with colleges and universities, contractors, and training centers, such as the EM Richland Operations Office's Volpentest Hazardous Materials Management and Emergency Response (HAMMER) Federal Training Center.

The EMCBC provides business and technical support services, with line-management authority for EM cleanup work at the <u>Energy Technology Engineering Center</u>, <u>Moab UMTRA</u>, <u>Separations Process Research Unit</u>, <u>WVDP</u>, <u>Nevada National Security Site</u>, and <u>Lawrence Berkeley</u> and <u>Brookhaven</u> national laboratories.

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Energy Secretary Rick Perry Honors EM's Oak Ridge Program With Two Awards



Oak Ridge Office of Environmental Management Federal Project Director Wendy A. Cain and Energy Secretary Rick Perry.

WASHINGTON, D.C. – Energy Secretary Rick Perry honored <u>Oak Ridge Office of Environmental</u> <u>Management</u>'s (OREM) Wendy A. Cain as Federal Project Director of the Year for 2016, and presented a team under Cain's oversight with the DOE's <u>Achievement Award</u>.

"A lot of people say that they have a great team and partner well with their DOE and contractor counterparts, but this really has been the key to our ongoing success at Oak Ridge," Cain said at the 2017 DOE Project Management Workshop on March 22 where she received the award. "A few items that have been particularly helpful in our success are a common vision of success, a sense of urgency, maintaining the focus on a strong safety culture, transparency of issues and a focus on problem-solving."

Described as the "best" of DOE project management leadership, Cain demonstrated exceptional leadership and project management acumen overseeing the demolition of a former uranium enrichment facility, according to DOE. Her leadership, attention to detail, empowerment of team members, and fostering of open communications enabled the demolition of the K-31 Building at the East Tennessee Technology Park (ETTP) almost four months ahead of schedule and about \$4 million under budget, which EM called a "tremendous" achievement.

Each year, <u>DOE</u> recognizes outstanding project management efforts as part of its project management recognition program.



Workers demolish the K-31 Building.

Cain manages a portfolio that includes 12 capital projects and four large operational activities. The annual plan for this scope is approximately \$200 million, and primarily consists of deactivation and demolition of contaminated facilities, and remediation of soils.

The K-31 team won one of two DOE Achievement Awards. The other award went to the U.S. Belle II Project, a DOE Office of Science project at the Pacific Northwest National Laboratory in Washington state.

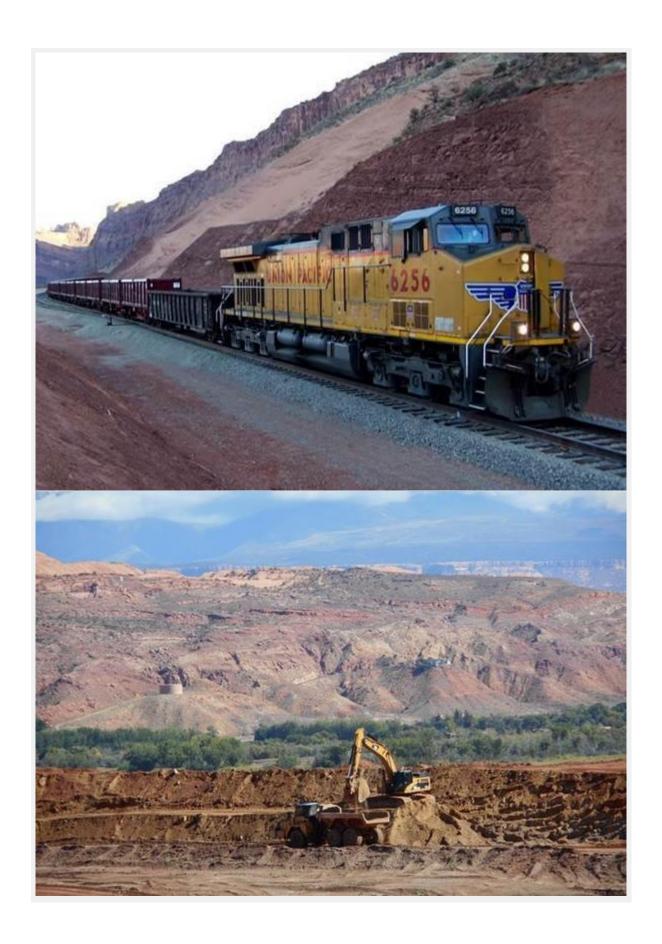
OREM completed the \$40 million K-31 demolition project in February 2016. The team successfully decontaminated and demolished the steel-framed building, one of five uranium enrichment facilities. DOE commended the team for its outstanding performance.

Completing the project ahead of schedule enabled the acceleration of ETTP cleanup, supporting a Departmental goal of returning an environmentally remediated site to the local community. OREM has already demolished hundreds of ETTP facilities as it transforms the site into a private-sector industrial park.

Built in 1951, K-31 covered about 19 acres under one roof and encompassed more than 1.66 million square feet of floor area.

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Moab Contractor Earns 'Good' Rating for Fiscal Year 2016



At top: A Union Pacific locomotive transports sealed containers of tailings from the Moab Uranium Mill Tailings Remedial Action Project to a disposal cell in Crescent Junction, Utah.

At bottom: The Moab site passed the halfway mark in the excavation of uranium mill tailings.

MOAB, Utah – Portage, Inc., contractor for EM's Moab Uranium Mill Tailings Remedial Action Project, met the majority of its performance goals for fiscal year 2016, earning more than \$1 million, or 72 percent, of the nearly \$1.5 million available award fee, and scoring an overall rating of "good" for the evaluation period.

"Portage successfully managed and implemented the project, maintaining a focus on safety," Acting Federal Project Director Justin Peach said. "Portage also developed an innovative 'roving crew' staffing approach that allowed us to meet revised shipping goals within budget."

Contractor award fee evaluations determine payment based on performance against stated objectives in accordance with annual award fee plans. EM releases information relating to contractor fee payments to further transparency.

It was Portage's last fiscal year under this contract. The contractor devised a plan to perform uranium mill tailings container maintenance, electrical upgrades and the replacement of equipment and containers. Workers completed the excavation and construction of Phase 3a of the disposal cell ahead of schedule, on budget and without safety or environmental incidents.



A worker sprays a polyurea coating on the inside of a container to ward off corrosion from the mill tailings material. About 150 containers are sprayed in total.

The contractor supported major assessments, surveillances, and walk-throughs. Portage had no chemical or biological personnel exposures and no releases of radiological or chemical contaminants to the environment. The project was in full compliance with storm water and dust permit criteria.

Following are Portage's award fee ratings and weights for each criterion:

- Project Management (10 percent) Good
- Tailings, Excavation, Haul, and Disposal (60 percent) Good
- Health and Safety (30 percent) Good
- Overall Weighted Result Good

The award fee determination scorecard can be viewed <u>here</u>.

Portage relocates the Moab site's uranium mill tailings and other contaminated materials to the disposal cell near Crescent Junction, Utah, 30 miles north of Moab.

The tailings pile occupies about 130 acres of the Moab site's approximately 480 acres. Workers have moved almost 8.6 million tons of tailings to the disposal cell since EM began excavation operations in 2009.

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Hanford Workers Achieve Important Step Toward Sludge Removal



Workers install a sludge storage treatment container to transport sludge from the 100-K Area to the center of the Hanford Site.

RICHLAND, Wash. – <u>EM</u>'s <u>Richland Operations Office</u> (RL) and contractor CH2M HILL Plateau Remediation Company (CH2M) recently installed sludge removal equipment in the 105K West Fuel Storage Basin and adjacent sludge transfer annex.

The basin currently stores approximately 35 cubic yards of radioactive sludge under 17 feet of water, 400 yards away from the Columbia River.

"The workers have done a great job getting us to this point. Their continued progress will help us deliver the project ahead of schedule," said Mark French, RL project director for Hanford's sludge removal project.

A CH2M official commended the company's employees for helping resolve project issues.

"Our workers helped solve many of the challenges associated with this one-of-a-kind task," said Eric Erpenbeck, a CH2M senior technical advisor for the sludge treatment project.

RL and CH2M have planned this project for several years. Over the last three years, engineers developed and procured more than 270 sludge removal tools and equipment.

In January, workers finished shipping sludge retrieval equipment from a full-scale mockup facility where it was tested to Hanford's 100-K Area. With installation complete, workers are set to test the equipment in the basin and annex.

They are preparing for a challenging project phase expected to begin in early April and designed to measure the equipment's readiness, while operators mitigate concerns.

On Hanford's central plateau, workers are modifying a facility, T Plant, to receive and store containers of sludge until they are processed and packaged for disposal.

The sludge removal project is key to the RL 2020 cleanup vision, which focuses on completing cleanup projects along the river corridor to eliminate risk to the Columbia River; transitioning cleanup activities to the site's central portion, where much cleanup remains; and increasing focus on key infrastructure projects that require upgrades and maintenance.

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Hanford Occupational Medical Contractor Earns 92 Percent of Fee

RICHLAND, Wash. – <u>EM</u>'s <u>Richland Operations Office</u> (RL) awarded occupational medical services contractor HPM Corporation (HPMC) nearly 92 percent of its available fee for fiscal year 2016.

"The contractor exceeded the majority of performance goals and objectives for the performance period," according to RL's fee determination summary. HPMC earned \$302,610 of a possible \$330,000.

Contractor award fee evaluations determine payment based on performance against stated objectives in accordance with annual award fee plans. EM releases information relating to contractor fee payments to further transparency.

For individual performance incentives, HMPC earned ratings of "excellent" for worker health and well-being, and "very good" for customer satisfaction and operational effectiveness.

"HPMC engaged with other Hanford contractors (OHCs) to coordinate and minimize workers' time away from work (and)... actively coordinated with the OHCs and provided occupational health staffing and services outside of the normal business hours identified in the contract," according to the summary.

RL recognized HPMC for a significant achievement in responding to a short-turnaround request to support the activities of the EM <u>Office of River Protection</u> tank farm operator contractor.

The evaluation noted room for improvement.

"Though there were no significant deficiencies, there were areas needing improvement, such as a need to reassess communication protocols to ensure workers fully understand the medical evaluation activities, corporate estimating system, and business and contract management," according to the fee determination summary.

Idaho Site Repurposes Enclosure for New Waste Treatment Project



Retrieval operators in an inner contamination enclosure empty a bin of its drums.

IDAHO FALLS, Idaho – Workers <u>removed more than 53,000 cubic meters of transuranic waste</u> stored in an <u>Idaho Site</u> enclosure, creating space to safely treat other waste.

Waste to be treated at the Transuranic Storage Area-Retrieval Enclosure (TSA-RE) comes from pits and trenches in the Radioactive Waste Management Complex's (RWMC) Subsurface Disposal Area. In the 1970s, workers loaded some of this waste into 55-gallon drums. Those drums were then placed in bins, with each bin holding eight drums.

The M-III Bin Project has more than 200 bins to empty. Crews that completed the transuranic waste retrieval are now unloading the bins in the TSA-RE's repurposed Retrieval Contamination Enclosure. Due to its former mission, this enclosure has a robust ventilation system, and airlocks and two inner contamination enclosures prevent the potential spread of contamination.



Workers overpack the old drums in new drums before sending them for characterization and processing based on the type of waste inside of them.

Contractor Fluor Idaho, which manages EM's cleanup at the site, will use proven treatment processes designed to treat the various types of waste in the 55-gallon drums. Workers will remove the drums from the bins, overpack them in new drums and remove them from the enclosure. Fluor will use approved treatment processes specific to each drum.

Different treatment processes will be used depending on the drums' contents. For example, a bin may contain three drums with sludge waste that can be handled at the site's RWMC Accelerated Retrieval Project's Sludge Repackaging Project; two drums with mixed low-level waste that can be repackaged and shipped to an offsite repository; and three drums with debris waste that can be treated by compaction at the site's supercompactor in the Advanced Mixed Waste Treatment Project.

Crews expect to complete treatment of the waste in the bins this summer.

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Oak Ridge Soil Remediation Project Nears End



Workers removed the top layer of clean soil to dig up and dispose 10,000 cubic yards of contaminated soil from ETTP's Exposure Unit 29.

OAK RIDGE, Tenn. – The Oak Ridge Office of Environmental Management (OREM) and its primary cleanup contractor URS|CH2M Oak Ridge (UCOR) are completing comprehensive remediation and final closure of a former pond at the East Tennessee Technology Park (ETTP) site.

Workers recently removed a layer of clean topsoil that had been placed over the area more than 30 years ago, allowing them to address the contaminated soil beneath it. Crews are digging up the soil, classified as low-level radioactive waste, and hauling it to the onsite Environmental Management Waste Management Facility.

When the project at the area known as Exposure Unit 29 is complete in April, Oak Ridge's EM program will have removed and disposed more than 10,000 cubic yards of contaminated soil from Exposure Unit 29. It equates to approximately 800 truckloads.

"While building demolitions are necessary and often capture the headlines, the men and women in our cleanup program are completing many other critical projects at ETTP to ensure the site is clean, safe, and marketable for its transfer," said OREM Acting Manager Jay Mullis.

This and other remediation efforts are being conducted under guidelines established by the federal Comprehensive Environmental Response, Compensation and Liability Act of 1980. This act addresses uncontrolled releases of hazardous substances from abandoned, non-operating areas like the former pond where contamination resulted from past operations.

The soil remediation efforts at ETTP are helping prepare the site for transfer to the private sector and future commercial industrial use. ETTP is divided into two cleanup regions: Zone 1, a 1,400-acre area outside the main plant, and Zone 2, the 800-acre area that comprises the main plant where former uranium enrichment and support operations were conducted.

OREM's goal is to complete cleanup at ETTP by the end of 2020. The program has already demolished hundreds of ETTP facilities and transferred 880 acres as it transforms the site into a private-sector industrial park.

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EM Discusses Business Opportunities with Native American Companies at Summit



LAS VEGAS – EM officials recently discussed business opportunities for Native American-owned companies within EM's cleanup program at the 2017 National Reservation Economic Summit hosted by the National Center for American Indian Enterprise Development. They met one-on-one with representatives from 15 companies and talked with dozens of summit attendees at EM's booth at the trade show. Here, EM Consolidated Business Center Small Business Program Manager Anne Marie Bird and EM Associate Deputy Assistant Secretary for Acquisition and Project Management Norbert Doyle talk with a summit participant.

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WTP Contractor Energizes Second Switchgear Building



RICHLAND, Wash. – EM Office of River Protection contractor Bechtel National Inc. this month energized the Balance of Facilities (BOF) switchgear building, Building 91, one of the more than 20 structures that make up the Balance of Facilities at the Waste Treatment and Immobilization Plant (WTP), and one of two switchgear buildings providing power to the WTP. Building 91 provides electrical support for BOF structures that will provide utilities and services such as steam, air and water to the WTP vitrification facilities. With its energization, permanent plant low-voltage power (480V) was provided to the Water Treatment Building and the Nonradioactive Liquid Waste Drain Pump House this month. The Water Treatment Building encompasses three major water systems, including the domestic (potable), demineralized and process water systems. These three systems are being turned over from construction to startup, and electrical testing of the systems will begin soon. Mechanical testing and flushing of the nonradioactive liquid waste disposal system also will start soon. Last September, BNI brought permanent power to Building 87, which is the primary electrical switchgear building at the WTP site. Building 87 provides power to the main facilities which comprise WTP, as well as to Building 91.

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Hanford WTP Workers Install Equipment Ahead of Interim Milestone







RICHLAND, Wash. – Workers at the Hanford Site's Waste Treatment and Immobilization Plant (WTP) finished installing a caustic scrubber, beating an interim milestone by nearly two weeks. The scrubber is a 19-ton piece of the offgas treatment system in the Low-Activity Waste (LAW) Facility. This system ensures exhaust from LAW meets air quality requirements. Other system components, including the thermal catalytic oxidizer and ammonia dilution skid, can be seen in the Hanford Vitrification Plant Virtual Tour. The LAW Facility is part of the Department's plan to start treating tank waste as soon as 2022. A phased approach to the plant allows startup, commissioning and early use of facilities that are complete or close to completion while EM's Office of River Protection resolves technical issues associated with the Pretreatment and High-Level Waste Facilities. The workers pictured are with Bechtel National Inc., the ORP contractor responsible for WTP.

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SRS Saves \$500,000 by Modifying Robotic Crawler



Operators modify a one-of-a-kind robotic recovery crawler used in H Canyon.

AIKEN, S.C. – The management and operations contractor at the <u>Savannah River Site</u> joined <u>EM</u>'s <u>Savannah River National Laboratory</u> (SRNL) to modify a one-of-a-kind robotic recovery crawler for different uses instead of buying a new one, saving about \$500,000 in taxpayer dollars.

The crawler — a remotely powered and controlled vehicle — inspects hazardous areas in <u>H Canyon</u>'s exhaust system. For years, SRS has used the crawler as a safe inspection method in the system's harsh environment with radiation, contamination, chemical and physical hazards and high air flow.

"The crawler program has proven to be a safe and effective way to inspect the facility exhaust system," Savannah River Nuclear Solutions (SRNS) Exhaust Tunnel Inspection Project Manager Bill Giddings said. "The crawler program team decided to modify the existing crawler this year instead of procuring a new crawler. This decision saved approximately \$500,000."

The existing crawler was originally designed for recovery and inspection, and it successfully completed those activities during the last evaluation of the exhaust tunnel. Some modifications completed this year included replacing the front end's forks, used for recovery, with a bucket. The bucket allows the crawler to be used as a front-end loader to remove debris from the tunnel path, creating a better surface for future crawler inspections. Other modifications included improving stability through a counter-weight replacement and adding additional video capability.

The crawler modifications took three months to complete. Giddings credits hard-working SRNS and SRNL employees with the successful completion.

"We couldn't have done it without the cooperation of our teams," he said. "SRS is truly lucky to have such an experienced, committed and talented workforce."

The H Canyon exhaust system is used to contain and direct the exhaust air flow from the canyon process areas to the sand filter system. That system removes the radionuclide particles from the air stream prior to release of the air to the environment.

H Canyon was built to produce nuclear materials to support the nation's defense weapons systems. Today, it helps eliminate or minimize nuclear materials through safe stabilization and disposition.

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SRNL Researcher Receives International Organization's Highest Honor

AIKEN, S.C. – An international organization has recognized <u>EM Savannah River National Laboratory</u> (SRNL) Fellow Technical Advisor Michael Brisson for his leadership in establishing standards for air quality and nuclear fuel-cycle analysis.

Brisson received the ASTM International 2017 Award of Merit, which includes the title of Fellow. It's ASTM's highest award for members who help develop standards in their industry.

ASTM, which stands for American Society for Testing and Materials International, is an international standards development organization. Its 140 technical committees and more than 30,000 members develop standards in a wide variety of applications and fields. The standards developed by ASTM are used around the world and incorporated into contracts, plans, codes, regulations and laws as guidance for use in a variety of fields and disciplines.

"Being a member of ASTM has given me a sense of fulfillment, and being recognized for my contributions has been rewarding," said Brisson. "ASTM's tag line is 'Helping our world work better,' and SRNL shares the common goal in developing standards to be used worldwide."



SRNL's Michael Brisson, ASTM International 2017 Award of Merit recipient and Fellow.

Brisson first became involved with ASTM in 2005 while conducting samples and analyzing trace-level beryllium at SRNL. At that time, DOE was implementing requirements for the Chronic Beryllium Disease Prevention Program. Seeing a need to identify a consensus standard for analytical methods, he helped establish a method of analyzing radioactively contaminated beryllium samples that SRNL continues to use today.

Brisson has chaired numerous ASTM committees, including the 500-member air quality working group. He serves in leadership positions for the nuclear fuel-cycle committee as chairman of the subcommittee on methods of test for nuclear fuel-cycle and as vice chairman of the subcommittee on quality assurance, statistical applications and reference materials. He is a member of ASTM's committee of standards, responsible for review and approval of all technical committee recommendations for actions on standards.

In his 12-year membership, Brisson has been the principal author of six new ASTM standards and has contributed major revisions to 10 others. The recipient of several other ASTM awards, Brisson was named President's Leadership Award winner in 2009.

Over his 28-year tenure at SRNL, Brisson has been involved with spectroscopy, the study of the interaction between light and matter. He provided support for laboratory quality assurance and accreditation, and continues to serve as a subject-matter expert in trace measurement of beryllium.

Brisson is leading an international team in revising a standard on the preparation of working reference materials in nuclear fuel-cycle laboratories. This project will provide greater quality for safeguards measurements while reducing the demand for certified reference materials.

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EM Reduces Costs by Improving Sustainability



EM's GHG emissions have declined over the years. Scope 1 emissions are from direct EM sources while Scope 2 emissions are from indirect EM sources.

WASHINGTON, D.C. – EM continues to achieve cleaner air while reducing costs.

In fiscal year 2016, EM reduced its greenhouse gas (GHG) emissions by 60 percent, exceeding a 50 percent target.

"EM field offices continue to cut life-cycle costs. These superb results testify to the hard work by numerous EM people and clearly show that focused efforts in many areas make a difference and add up to a greater sum total," said Andrew Szilagyi, director of EM's Office of Infrastructure and Deactivation & Decommissioning. "As we keep pushing forward, our aim is to more fully integrate life-cycle cost reduction thinking into our decision-making. Bravo to our sites!"

The GHG emissions drop was due in large part to the Savannah River Site biomass cogeneration plants, which use biomass to produce electricity and steam. The reduction compares to removing 111,443 passenger vehicles from the roads for a year.

EM also lowered its energy use intensity by 39 percent and water use intensity by 6 percent; raised its renewable energy use by 33 percent; and ensured 99 percent of its computers, laptops and monitors have power management software to minimize energy use. These efforts led to an estimated \$1.1 million cost reduction.

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Savannah River Site Contractor Wins Global Safety Award



Savannah River Remediation employee Roger Staten demonstrates balance techniques with the Step Up to Safety campaign at the 2016 Savannah River Site Safety Expo.

AIKEN, S.C. – A company recently honored EM's <u>Savannah River Site</u> liquid waste contractor with a safety award that went to just eight organizations worldwide.

Savannah River Remediation (SRR) won the Strategic Safety Associates (SSA) 2016 Project Excellence Merit Award for innovative training and implementation of SSA's MoveSMART training. SRR uses MoveSMART training modules focusing on strength, control and balance and prevention of sprains, strains, slips, trips and falls.

SRR has collaborated with SSA of Portland, Ore., to equip workers with techniques to avoid injuries since 2010.

SSA has hundreds of customers around the world. Other organizations recognized by SSA for the award include U.S. Steel, Honda Manufacturing of Canada and United Airlines.

MoveSMART founder Robert Pater lauded SRR for its implementation of a mobile slip simulator — a portable laboratory equipped with a video monitor, ceiling support beam and walking surface, that when treated, resembles a sheet of ice. This simulator experience reinforces the balance module techniques, according to SRR Environmental, Safety, & Health (ESH) Director Patricia Allen.

"When going through the mobile slip simulator, employees experienced what it is like when walking on slippery surfaces without falling," Allen said. "After their first trip over the surface, they received instruction on the proper way to walk on such areas. Their second trip was usually much better."

One reason SSA chose SRR for the award was that it developed and implemented an employee safety campaign called Step Up to Safety. It draws from MoveSMART techniques.

"SRR has a mantra that we like to instill in our workforce, and that is 'Walking is working,'" Allen said. "A staggering number of on-the-job injuries involve slips, trips, or falls while doing simple tasks like walking."

The campaign provides prefabricated steps with handrails where participants learn MoveSMART balance techniques to prevent slip and fall injuries. The SRR ESH programs held several training sessions at SRR facilities and site-wide safety events. Roger Staten, an SRR employee in the ESH Programs organization, led the training sessions.

"The beauty of MoveSMART is the simplicity of the techniques," Staten said. "It is amazing that simple changes in the way we step or the way we grip a handrail can increase our degree of balance and safety. I enjoyed having the opportunity to share those techniques with my co-workers.

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Hanford Workers Take Major Steps in Burial Ground Cleanup



RICHLAND, Wash. – Workers with <u>Hanford Site</u> contractor CH2M HILL Plateau Remediation Company recently finished retrieving a total of 2,201 drums of waste from trenches in the <u>618-10 Burial Ground</u>. Buried about 20 feet in the trenches, the drums contained radioactive waste from laboratories in Hanford's fuel fabrication and research area from 1954 through 1963. Crews will continue remediating the last 14 of 94 waste-filled pipes buried vertically in the burial ground. Here, workers process waste submerged in grout for contamination control in the trench area. A forklift driver transports treated waste that has been placed in a new drum for the next step in the shipping process.

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U.S, U.K. Cleanup Organizations Plan to Expand Collaborative Projects



Representatives from EM, Savannah River National Laboratory, U.K. Nuclear Decommissioning Authority, U.K. National Nuclear Laboratory and U.K. Department of Business, Energy and Industrial Strategy gather at the 16th Standing Committee Meeting.

PHOENIX – <u>EM</u>, <u>Savannah River National Laboratory</u> (SRNL) and United Kingdom nuclear cleanup organizations agreed to develop more tangible collaborative projects at their recent 16th Standing Committee Meeting at the <u>2017 Waste Management Symposia</u>.

Participants agreed that tangible projects better leverage the excellent long-term U.S-U.K. relationships and maximize the collaboration's financial and technical benefits.

"The U.S. and U.K. collaboration continues to set the benchmark for other government-to-government collaborative efforts, but we both know that we can do better and that will be the focus of effort over the next five years," said Ana Han, head of EM's International Program.

Han referred to the recent renewal of the trilateral <u>Statement of Intent</u> (SOI) by EM and the U.K. <u>Nuclear Decommissioning Authority</u> (NDA) and <u>National Nuclear Laboratory</u> (NNL) through March 2022.

Adrian Simper, NDA's director of technology and strategy, said tangible projects bring the most value.

"The intangible benefits of this relationship have been excellent in terms of the sharing of know-how and lessons learned, but to get the greatest value out of the partnership, we need to identify some tangible projects where we can pool our resources and expertise," he said.

Keith Miller, head of marketing and export controls for NNL, praised the continued U.S.-U.K. collaboration and noted its importance.

"The outstanding collaboration between the U.S. and the U.K. continues across a broad range of activities and includes the best from industry, academia and government. These collaborations deliver real benefits in reducing baseline costs and schedule timescales."

At the meeting, representatives from EM, SRNL, NNL, NDA and its subsidiaries RWM Ltd and Sellafield Ltd., and the U.K. Department of Business, Energy and Industrial Strategy discussed current collaborative activities among the organizations under the SOI. Those activities focus on startup and commissioning; aging infrastructure management; and robotics and remote technology development and implementation.

Since the SOI's inception in 2007, the U.S. and U.K. organizations have held numerous information and lessons learned exchanges on a variety of topics, from contracting strategies to plutonium management. The two countries' cleanup programs are of similar scale and complexity and benefit from leveraging operational experiences and technologies.

The 17th Standing Committee Meeting is scheduled to take place in Manchester, England in November.

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Hanford Contractor Honors Employee for Safety Excellence

RICHLAND, Wash. – A safety advocate of nearly 40 years recently received a top honor for promoting safety across the <u>Hanford Site</u>.

John Jeskey, a safety representative with contractor Mission Support Alliance (MSA), was awarded the company's Kathryn A. Wheeler Safety Leadership Award for fostering a safe work environment.

Jeskey has been integral to several key safety initiatives across the site, including ensuring each facility has a safety representative, improving the way safety is communicated to employees, and involving employees in the safety improvement process.



John Jeskey, a safety representative with EM Richland Operations Office contractor Mission Support Alliance. Twenty years ago, Jeskey helped create the Hanford Atomic Metal Trades Council (HAMTC) safety representatives' program. He helped promote the Department of Energy's <u>Voluntary Protection Program</u> across Hanford, promoting effective worksite-based safety and health.

"The safety program has come a long way over the last 20 years," Jeskey said. "I can honestly say we have saved lives and prevented serious injury. I'm honored to be recognized with this award, and I look forward to continuing to ensure workers have the tools they need to be safe at work."

The award is presented each year to recognize a member of the MSA workforce who demonstrates support of safety through collaborative, cooperative and proactive worker engagement.

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Acting EM Assistant Secretary Sue Cange Joins FIU Students at Conference



Acting EM Assistant Secretary Sue Cange gathers with students from the DOE-FIU Science and Technology Workforce Development Program at the recent 2017 Waste Management Symposium. Cange is at center, Florida International University (FIU) Applied Research Director Dr. Leonel E. Lagos, right of Cange, and EM International Program Analyst Benjamin Rivera, far right; DOE Fellows Gene Yllanes, back row, left to right, Hansell Gonzalez-Raymat, Mohammed Albassam, Alexander Piedra,

Alejandro Gonzalez, Alejandro Hernandez, Sebastian Zanlongo, Juan Morales, Michael DiBono, Andres Cremisini; and Clarice Davila, front row, left to right, Silvina Di Pietro, Christine Wipfli, Frances Zengotita, Sarah Solomon, Ripley Raubenolt and Alexis Smoot. Overseen by EM and FIU's Applied Research Center (ARC), the innovative DOE-FIU Science and Technology Workforce Development Program allows students to conduct hands-on applied research related to EM's challenges. Program leaders train and mentor minority engineers to enter DOE's workforce in technical areas of need. DOE Fellows perform research at FIU and EM sites, linking research solutions to EM's challenges to student academic goals, such as completing theses and dissertations. After graduation, the students are encouraged to pursue permanent careers at EM, DOE national laboratories and contractors supporting the agency across the DOE complex. ARC provides technical research support to EM in environmental remediation and student workforce development for high-priority areas such as radioactive waste processing and facility deactivation and decommissioning.

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DOE Honors Hanford for Protecting Bird Species



RICHLAND, Wash. – <u>DOE</u> gave the <u>Hanford Site</u>'s avian protection program honorable mention for the 2017 <u>Presidential Migratory Bird Federal Stewardship Award</u>.

"To be recognized for our work is a great honor and a tribute to our partnerships and the employees dedicated to preserving Hanford's migratory bird population," said H. Boyd Hathaway, who oversees the Hanford Site ecological program for EM's Richland Operations Office.

The Department recognized the program for monitoring key avian species, evaluating potential impacts from cleanup, taking protective measures, training site personnel about migratory bird protection, and protecting and enhancing important migratory bird habitats.

The program, managed by contractor Mission Support Alliance (MSA), focuses on key species, including ferruginous hawks, burrowing owls, American white pelicans, bald eagles and sage-steppe passerines, including the sagebrush sparrow.

At approximately 580 square miles, the Hanford Site represents one of the largest remaining native shrub-steppe communities. With diverse habitats, the site provides permanent or transitory habitat for more than 200 bird species.

Strong relationships with agencies, such as the U.S. Fish and Wildlife Service, the Washington Department of Fish and Wildlife (WDFW) and the Bonneville Power Administration, helped the site develop monitoring and compliance expectations for migratory birds.

Responsible for ecological monitoring at Hanford, MSA was a major contributor to the 2016 ferruginous hawk and sagebrush songbird survey programs run by WDFW and the Washington Audubon Society. The company also works with local organizations, including Blue Mountain Wildlife, to rehabilitate injured birds, including the <u>release of a rehabilitated owl</u> in October 2016.

MSA and its partners continue to research and improve migratory bird protection and enhance their understanding of avian behavior at the site.

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Contributors

Lynette Bennett, West Valley Demonstration Project

Jared Bierbach, EM Headquarters

Angela Cooney, Moab Site

Patrick Conrad, Hanford Site

Jennifer Copeland, Hanford Site

Rick Dale, Idaho Site

Albes Gaona, EM Headquarters

Jessica Gleason, EM Headquarters

Colleen Hart, Savannah River Site

Mark Heeter, Hanford Site

Jamacia Jimerson, Savannah River Site

Laurie Judd, EM Headquarters

Danielle Miller, Idaho Site

Lindsey MonBarren, Savannah River Site

Michael Nartker, EM Headquarters

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